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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--------------------------------------------------------|-------------|----------------------|---------------------|------------------|--|
| 09/993,678 | 11/27/2001 | Satoshi Hanada | Q67285 | 7280 | |
| 7590 05/10/2004 | | | EXAMINER | | |
| SUGHRUE MION, PLLC | | | CHANG, VICTOR S | | |
| 2100 Pennsylvania Avenue, NW Washington, DC 20037-3213 | | | ART UNIT | PAPER NUMBER | |
| 5 , | | | 1771 | | |

DATE MAILED: 05/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | · · · · · · · · · · · · · · · · · · · | Application No. | Applicant(s) | | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--------|--|--|--|
| Office Action Summary | | 09/993,678 | HANADA ET AL. | | | | |
| | | Examiner | Art Unit | | | | |
| | | Victor S Chang | 1771 | | | | |
| The MAILING DATE Period for Reply | of this communication app | pears on the cover sheet with the | correspondence add | iress | | | |
| THE MAILING DATE OF T - Extensions of time may be available after SIX (6) MONTHS from the may be a self-below of the period for reply specified about 15 NO period for reply is specified a Failure to reply within the set or extensions. | THIS COMMUNICATION. e under the provisions of 37 CFR 1.1: ailing date of this communication. ve is less than thirty (30) days, a reply bove, the maximum statutory period velended period for reply will, by statute ter than three months after the mailing | Y IS SET TO EXPIRE 3 MONTH 36(a). In no event, however, may a reply be to within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDON of date of this communication, even if timely file | imely filed ys will be considered timely. n the mailing date of this con ED (35 U.S.C. § 133). | | | | |
| Status | | | | | | | |
| 1) Responsive to comm | nunication(s) filed on 02 A | oril 2004. | | | | | |
| 2a)⊠ This action is FINAL | • • • • • • • • • • • • • • • • • • • • | action is non-final. | | | | | |
| 3) Since this application | /_ | | | | | | |
| closed in accordance | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | | |
| 4) ☐ Claim(s) 3 and 5-7 is 4a) Of the above clai 5) ☐ Claim(s) is/ar 6) ☐ Claim(s) 3 and 5-7 is 7) ☐ Claim(s) is/ar 8) ☐ Claim(s) are s | m(s) is/are withdrawe e allowed. s/are rejected. e objected to. | vn from consideration. | | | | | |
| Application Papers | | | | | | | |
| 9)☐ The specification is o | bjected to by the Examine | r. | | | | | |
| 10) The drawing(s) filed of | 0)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner. | | | | | | |
| Applicant may not requ | Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11)☐ The oath or declaration | on is objected to by the Ex | aminer. Note the attached Office | Action or form PTC | D-152. | | | |
| Priority under 35 U.S.C. § 11 | 9 | | | | | | |
| a) All b) Some * 1. Certified copie 2. Certified copie 3. Copies of the application fro | c) None of: s of the priority documents s of the priority documents certified copies of the prior the International Bureau | s have been received in Applicat ity documents have been receiv | tion No red in this National S | Stage | | | |
| Attachment(c) | | | | | | | |
| Attachment(s) 1) | O-892) | 4) 🔲 Interview Summary | / (PTO_412) | | | | |
| 2) Notice of Draftsperson's Patent | | 4) 🔲 Interview Summary Paper No(s)/Mail D | | | | | |
| 3) Information Disclosure Stateme Paper No(s)/Mail Date | - · · · · · · · · · · · · · · · · · · · | 5) Notice of Informal I 6) Other: | Satent Application (PTO- | 152) | | | |

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_ DETAILED ACTION

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1. The Examiner has carefully considered Applicants' amendments and remarks filed on 4/2/2004. Applicants' amendments to claim 3 and newly added claims 5-7 have all been entered.

- 2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 3. Rejections not maintained are withdrawn.

Response to Amendment

4. Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al. (US 5116881) in view of WO 94/07930, newly cited as evidence of the state of the art, substantially for the reasons set forth in section 6 of Paper No. 120203, together with the following additional observations.

It is noted that newly added claims 5-7 are de facto duplicates of cancelled claims 1, 2 and 4, respectively.

With respect to Applicants' argument that "Park does not teach laminating a foam sheet with another object, i.e., a substrate." (Remarks, page 6, first full paragraph), the Examiner notes that the subject matter "laminating a foam sheet with another object" is neither recited in independent claim 3, nor in newly added independent claim 5 and its dependent claims 6 and 7. Applicants' argument is irrelevant.

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For newly added claim 6, the Examiner repeats (see Paper No. 6, page 3) that—although Park lacks an express teaching about the suitable blend ratio of the carboxylic acid modified polyolefin containing adhesive layer, it is believed that the art of tie layer is old and well known, and blending suitable amount of carboxylic acid modified polyolefin with unmodified polyolefin is conventional. Note also as evidence of the state of the art Chou et al. (US 4990562) which teaches that suitable adhesive resins for a multilayer sheet structure include polyolefins modified (or grafted) with maleic anhydride, etc., and blends of these polymers with polyolefins (column 6, line 55 to column 7, line 19). As such, in the absence of unexpected results, it would have been obvious to one of ordinary skill in the art to modify Park's tie layer with a suitable blend of polyolefin and carboxylic acid modified polyolefin, motivated by the desire to obtain a strong adhesion to between laminated layers, as taught by Park.

For newly added claims 5 and 7, the Examiner repeats (see Paper No. 6, page 3) that although Park is silent about the infrared property of the laminate, it is noted that the prior art combination <u>anticipates the composition of the non-foamed layer</u> of claims 5 and 7, and its <u>inherent</u> infrared property in claim 5 is also believed to be anticipated by the prior art combination. It should be noted that Park discloses an additional element (functional layer) not claimed in the instant invention is irrelevant.

With respect to Applicants' response arguing that "the prior art does not teach or suggest foamed polyolefin sheet comprising a non-foamed surface layer comprising the claimed spectrally-characterized thermoplastic resin composition." (Remarks, page 6,

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bottom paragraph), the Examiner repeats that Park's invention teaches the invention as claimed, as set forth above, Applicants' argument to the contrary notwithstanding.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DANIEL ZIRKEH PRIMARY EXAMINER GROUP 1300

Daniel Zukin